AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.   (Currently Amended): A method of describing pattern repetitiveness of an image comprising the steps of:

(a) projecting an image on a predetermined axis having a predetermined direction;

(b) decomposing the projected image down one level;

(c) increasing a threshold value ~~until~~ while a pattern quantizing value is retained, and denoising the decomposed data; and

(d) describing pattern repetitiveness of the image using the pattern quantizing value of the denoised data and the threshold value used for denoising.

2.   (Original): The method of claim 1, wherein the decomposition is based on a discrete wavelet transform.

3.   (Original): The method of claim 1, wherein step (c) comprises the steps of:

(c-1) calculating the pattern quantizing value of the projected image;

(c-2) decomposing the projected image down one level;

(c-3) denoising the decomposed result data using a predetermined threshold value;

(c-4) calculating the pattern quantizing value of the denoised data;

(c-5) discriminating whether a current pattern quantizing value is identical to a previous pattern quantizing value;

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(c-6) increasing the threshold value if the current pattern quantizing value is identical to the previous pattern quantizing value, and returning to step (c-3); and

(c-7) determining the previous pattern quantizing value as a final pattern quantizing value if the current pattern quantizing value is not identical to the previous pattern quantizing value.

4.   (Original): The method of claim 3, wherein step (d) comprises:

(d') describing the pattern repetitiveness of the image on the basis of the pattern quantizing value determined in the step (c-7) and the threshold value.

5.   (Currently Amended): A pattern repetitiveness describing method of an image comprising the steps of:

(a) projecting an image on a predetermined axis having a predetermined direction;

(b) decomposing the image ~~until~~ while the level at which a previous pattern quantizing value and a pattern quantizing value after the decomposition are retained as they are, and denoising; and

(c) describing the pattern repetitiveness of the image using one of the pattern quantizing value of the data from which at least level number and noise are removed, and the threshold value used for denoising.

6.   (Original): The method of claim 5, wherein the decomposition is based on a discrete wavelet transform.

7.   (Original): The method of claim 5, wherein step (b) comprises the steps of:

(b-1) calculating the pattern quantizing value of the projected image;

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(b-2) decomposing the projected image down one level;

(b-3) calculating the quantizing value of the decomposed result data;

(b-4) determining whether the previous pattern quantizing value is identical to the pattern quantizing value after the decomposition;

(b-5) if the previous pattern quantizing value is identical to the pattern quantizing value after the decomposition, returning to step (b-2); and

(b-6) if the previous pattern quantizing value is not identical to the pattern quantizing value after the decomposition, determining a previous level as a final level.

8.   (Original): The method of claim 7, wherein the pattern repetitiveness describing method of the image further comprises the steps of:

(b-7) denoising data of the level determined in the step (b-6) using the predetermined threshold value;

(b-8) calculating the pattern quantizing value of the denoised data;

(b-9) determining whether the current pattern quantizing value is identical to the previous pattern quantizing value;

(b-10) if the current pattern quantizing value is identical to the previous pattern quantizing value, increasing the threshold value, and returning to step (b-7); and

(b-11) if the current pattern quantizing value is not identical to the previous pattern quantizing value, determining the previous pattern quantizing value as a final pattern quantizing value.

9.   (Currently Amended): A method of grouping images having similar texture characteristics within an image database in which a plurality of images are stored, the method comprising the steps of:

(a) projecting an image on a predetermined axis having a predetermined direction;

(b) decomposing the projected image down one level;

(c) increasing a threshold value ~~until~~ while a pattern quantizing value is retained, and denoising the decomposed data;

(d) determining pattern repetitiveness vectors including the pattern quantizing value of the denoised data and the threshold value used for denoising as pattern repetitiveness descriptors of images; and

(e) grouping images having similar texture characteristics using the pattern repetitiveness descriptors of the images.

10.   (Currently Amended): A method of grouping images having similar texture characteristics within an image database in which a plurality of images are stored, the method comprising the steps of:

(a) projecting an image on a predetermined axis having a predetermined direction;

(b) decomposing the image ~~until~~ while the level at which a previous pattern quantizing value and a pattern quantizing value after the decomposition are retained as they are, and denoising;

(c) determining a level number of the denoised data, a pattern quantizing value, and a threshold value used for denoising as pattern repetitiveness descriptors of the image; and

(e) grouping images having similar texture features using the pattern repetitiveness

descriptors of the images.

11. (New): The method of claim 1, wherein the step (c) comprises increasing the

threshold value until the pattern quantizing value changes.